



ACCELERATING PAYMENT PROVIDERS' DIGITAL TRANSFORMATION IN THE POST-PANDEMIC ERA

Digital transformation in payments has leapt ahead in the pandemic. But it's not just the pace of change that is surprising providers' priorities have also been turned on their heads. Still, significant challenges persist across the board. The pace of transformation is unlikely to wither away; hence, payment technology providers need to align investments to capitalize on this opportunity.



In the past decade, payment infrastructure has become nimbler and easier to use. This infrastructure, when blended with easy-to-use application programming interfaces (APIs), is behind some of the most successful contactless, real-time payment products to date. For example, WeChat (China) and Paytm (India) are among the dominant contactless mobile payment platforms in their respective countries.¹

Contactless payments surged 75% globally in 2020 to over \$2 trillion.² Consumers abandoned cash payments and embraced technology-driven, safer touch-free options. By April 2021, Visa had processed over a billion contactless transactions across Europe in less than 12 months.³

The pandemic forced many card and payment providers to sprint ahead on their digital transformation journeys to meet the rising demand.

And this use of contactless payments is unlikely to taper off. In fact, consumers are expected to explore and expand into other forms of contactless payments. A Mastercard survey revealed that 93% of consumers will possibly dabble with emerging contactless technologies such as biometrics, digital currencies, or QR codes in 2021.⁴

To understand the pace of digital transformation in financial services over the course of the pandemic, Infosys conducted a global survey of 1,000 respondents from across the industry in March. A subset of these respondents — 53 senior executives — were from card and payment providers across the U.S., Europe, Australia, and New Zealand. While not statistically significant enough to draw detailed results, analyzing how this small group of senior leaders has reacted still makes for interesting reading on wider trends in the industry.

Focus shifts as speed increases

The pace of digital acceleration in cards and payments over 2020 has been astounding. Eighty-five percent of respondents indicate that their organizations have at least doubled their pace of digital transformation. This includes nearly 20% that more than quadrupled their pace during the past year.

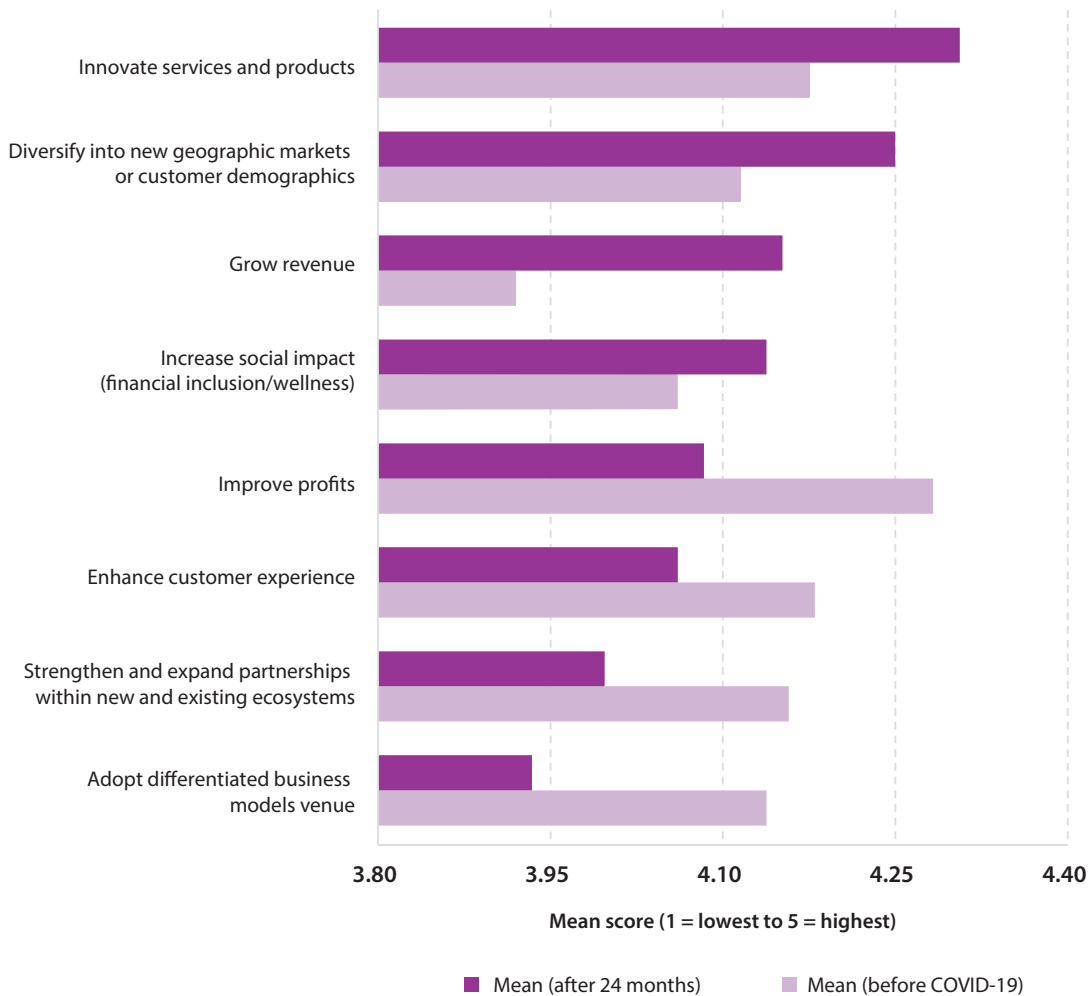
Our survey shows that digital transformation priorities have turned upside down since the pandemic. Payment providers' digital transformation journeys started out prior to the pandemic with the focus points that one would expect: profits, partnerships, and customer experience (see Figure 1).

But executives in our survey made it clear they are deprioritizing those past initiatives for those that provide productive business cases. Now, the industry sees innovation and diversification as two of the top priorities. Revenue and social impact were the two lowest in 2020 but have now moved up to third and fourth places, respectively. Conversely, "Enhance the customer experience" was one of the highest priorities before COVID-19 and now is expected to be one of the lowest in the next two years.

This shift in priorities may well be due to the fact that before the pandemic payment networks had already adopted and established contactless and online payments for consumers and businesses. However, once the pandemic struck, the focus became scaling and growth.

In this context, perhaps the most interesting priorities of these respondents are the focus on innovation and on social impact.

Figure 1. Strategic priorities changed since the outbreak of the pandemic



Continued digital technology investment

When asked about technology investments, a few areas emerged as pivotal. Notably, data analytics is the most important to survey respondents, followed by APIs and blockchain.

Data analytics is an obvious choice because of the business potential it unlocks for payment providers. Its uses extend to cost optimisation, fraud avoidance, and enhanced customer offerings, among others. For example, PayPal uses advanced analytics on its nearly 20 terabytes of daily user data to create customized offerings and to detect and avoid fraud.⁵

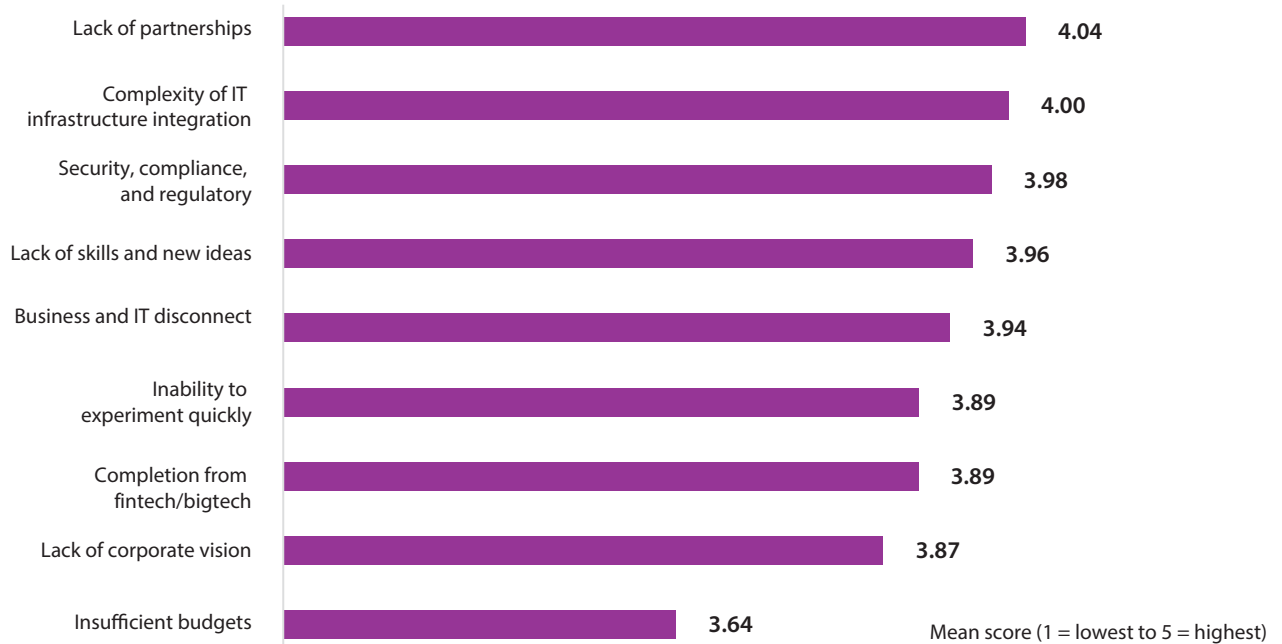
The benefits of data analytics extend beyond payment providers to all parties involved in a transaction — merchants gain through optimized processes and customers benefit from a safe and secure payment. J.P. Morgan leverages merchant payment data to optimize its payment performance, which in turn reduces the cost of payment acceptance for merchants.⁶

Payment providers are embracing API and microservices architecture to modernize their legacy infrastructure and build a digital core. API microservices allow firms to widen the integration of their offerings across platforms and services and to broaden their customer bases. Due to the technology's critical role, 87% of respondents indicate that

investments in API microservices will increase over the next 24 months. 2021 is already seeing investments by firms to strengthen their capabilities. American Express Ventures and PayPal Ventures invested in Codat, a fintech that offers an API-based platform that links tools and services used by small and midsize businesses.⁷

Blockchain has perhaps the clearest relevance to payment providers.⁸ The technology has the potential to prevent fraud and reduce clearing and settlement costs, and it is fast. By nature, it creates a ledger of payments and is shared with all parties involved, but most importantly, it is transparent. There are challenges, however, in terms of blockchain's speed and efficiency.

Figure 2. Challenges in progressing on digital transformation initiatives



Yet, given how inefficient cross-border payments currently are, this could be a clear use case for early adoption. Whether it is blockchain or a different distributed ledger architecture, it's clear that there is a need to simplify cross-border payment transactions that are usually slow, expensive, and paper-intensive and involve multiple parties across geographies.

However, when considering payment providers' investment decisions over the next two years, cybersecurity and artificial intelligence (AI) topped the list, with 89% of respondents saying they would increase investments in these technologies. The surge in digital payments has forced payment providers to enhance their cybersecurity capabilities and safeguard customer information. Payment providers are boosting AI and machine learning (ML) capabilities in-house or through partnerships. Visa launched its AI platform VisaNet +AI to make its payment processing predictable, transparent, and fast.⁹ Additionally, AI and ML have been deployed by companies. American Express, on the other hand, is using AI/ML to improve customer service capabilities.¹⁰

Challenges remain

It seems money is not holding the industry back. Budgets were cited as the least important concern for payment providers. Instead, there is a long list of other roadblocks they face — all which scored high among our respondents (see Figure 2).

Nearly all our survey respondents indicate complicated IT infrastructure and lack of partnerships within payment ecosystems as the most challenging aspects. Payment providers with heavy legacy technology infrastructure perhaps face the maximum weight of these issues. For them, the key lies in integrating the new and the old. If this integration is not managed effectively, it could create larger obstacles — known as a technical debt — to transformation in the future.

Security concerns continue to weigh on the minds of respondents. And the rapid pace of digital has led to concerns over lack of skills. Adding to their woes, the persistent disconnect between the business and IT, the lack of corporate vision, and an

inability to experiment combine to make it difficult for providers to compete against fintechs and big techs, which is also listed as a key concern.

The rise of digital currencies

The pandemic acted as an inflection point as payment providers accelerated their digital transformation journeys and tested their abilities to deliver at scale. Reacting quickly to changes in customer needs, payment providers flipped their strategic priorities toward scale and innovation. These swift changes were well supported by budgets.

The sector reacted well to the opportunities and challenges of the pandemic. However, several roadblocks — such as a lack of reliable partnerships, complexity of technology infrastructure, and security — still exist along the way. But the struggles highlight the difficulty in getting things done right.

The payments industry will have to look at how it will solve these challenges across the board. While the industry deals with the challenges, a larger transformation can be seen on the horizon. With the advancements in blockchain technology, central bank digital currencies and other cryptocurrencies can now be taken more seriously. In fact, the rising interest in cryptocurrencies from private players has forced regulators to dig deeper into the workings of digital currencies.¹¹ Now, over 86% of the world's central banks are actively pursuing these currencies.¹² Digital currencies will be more regulated and controlled, as central banks will have a larger influence over them, while blockchain provides ease of accounting and settlement through the distributed ledger.

While it could be a decade before any concrete steps are taken, with shrinking technology cycles, the payments industry could be unrecognizable once these changes come into play.

The transition to digital currencies poses significant opportunities as well as threats for banks. A digital currency could significantly speed up ledgering and settlement and lead to much faster payment rails. On the other hand, it could disintermediate payment providers.

The East inspires real-time payments in the West

The success of platforms in the East and the progress made on creating a standardized messaging format such as ISO 20022 have prompted countries in the West to provide real-time payments. As economies begin to slowly open up post pandemic, payment initiatives are seeing significant developments. Governments, including those in the U.S. (FedNow), the U.K. (Pay.uk), and Canada, have announced real-time payment initiatives. On the other hand, large private providers such as Mastercard are building capabilities through acquisitions (Vocalink, NETS), while organizations such as Visa are adding value-added products that run over a real-time payment infrastructure.

Contactless payments through platforms have seen an inflection point due to the pandemic. But there are a lot more changes to come. The next challenge lies with nailing down real-time payments. Many countries in the West are catching up, driven by the changes in the East. Yet, further beyond that lies the threat of disruption from digital currencies, which could make real-time payments redundant.

Opportunities arise post the pandemic

The findings of this survey indicate that, after the pandemic, payment transformation is going to accelerate even further. As global economies begin to slowly open up, payment volumes will begin to rise. The travel, hospitality, and entertainment sectors are beginning to see volume come back. Payment providers that had to put several programs on hold due to the pandemic are now seeing significant traction. Several initiatives from before the pandemic are resuming, and new areas are emerging. Challenges remain, but payment transformation presents a huge opportunity for players across the ecosystem.

The payments sector is seeing a gold rush like that in the 1840s in California, and there is huge opportunity for transformation across the spectrum.



References

1. [WeChat to WhatsApp: how the East could revolutionize payments in the West](#), Samad Masood, Sharan Bathija, October 2019, Infosys.
2. [Mobile Contactless Payment Market to Surge by 24% to \\$2.5 Trillion in 2021](#), Nica San Juan, May 18, 2021, ComprArAcciones.
3. [One Billion Additional Touch-free Visa Payments Made as Consumers Embrace Contactless Commerce](#), April 7, 2021, Visa.
4. [Mastercard New Payments Index: Consumer Appetite for Digital Payments Takes Off](#), May 3, 2021, Mastercard.
5. [Big Data Use Cases: How PayPal leverages Big Data Analytics](#), July 5, 2021, Dezyre.
6. [J. P. Morgan: Using Transaction Data To Help Merchants Optimize Cash Flow](#), Oct. 7, 2020, PYMNTS.
7. [Amex Ventures, PayPal Ventures Invest In SMB Data Firm Codat](#), March 2, 2021, PYMNTS.
8. [Solutions for Blockchain-Driven Transformation in Consumer Banking](#), Pramod, Beligere, 2018, Infosys.
9. [Visa Introduces AI-Powered Innovations for Smarter Payments](#), Feb. 2, 2021, Yahoo Finance.
10. [Amex bets on AI and NLP for customer service](#), Sage Lazzaro, June 16, 2021, VentureBeat.
11. [WeChat to WhatsApp: how the East could revolutionize payments in the West](#), Samad Masood, Sharan Bathija, October 2019, Infosys.
12. [Wall Street banks brace for digital dollars as the next big disruptive force](#), Jeff Cox, April 19, 2021, CNBC.

Author

Jay Nair

Senior Vice President, Industry Head – Financial Services, Americas

jay_nair@infosys.com

About Infosys Knowledge Institute

The Infosys Knowledge Institute helps industry leaders develop a deeper understanding of business and technology trends through compelling thought leadership. Our researchers and subject matter experts provide a fact base that aids decision-making on critical business and technology issues.

To view our research, visit Infosys Knowledge Institute at infosys.com/IKI

For more information, contact askus@infosys.com



© 2021 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.